







How to change front coil springs on Audi A4 B6 Avant – replacement guide



VIDEO TUTORIAL

(i) Important!

This replacement procedure can be used for: AUDI A4 (8E2, B6) 1.9 TDI, AUDI A4 Avant (8E5, B6) 1.9 TDI

The steps may slightly vary depending on the car design.

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REPLACEMENT: COIL SPRINGS – AUDI A4 B6 AVANT. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Multipurpose grease
- Copper grease
- Combination spanner #16
- Combination spanner #18
- Drive socket # 16
- Drive socket # 18
- HEX bit no.H6.
- Wheel impact socket #17

- Ratchet wrench
- Torque wrench
- Hammer
- Flat chisel
- Pin punch
- Flat Screwdriver
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

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Replacement: coil springs – Audi A4 B6 Avant. Tip from AUTODOC:

- Both coil springs of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right coil springs of the front suspension.
- All work should be done with the engine stopped.

REPLACEMENT: COIL SPRINGS – AUDI A4 B6 AVANT. USE THE FOLLOWING PROCEDURE:

1



Open the bonnet.

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Remove the cowl grille seal.

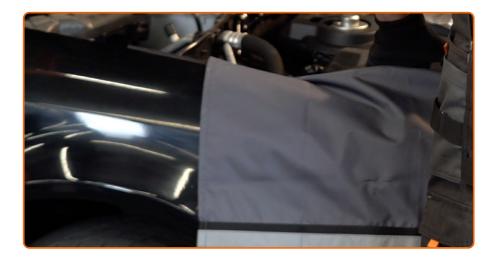
3



Raise up and remove the cowl grille.

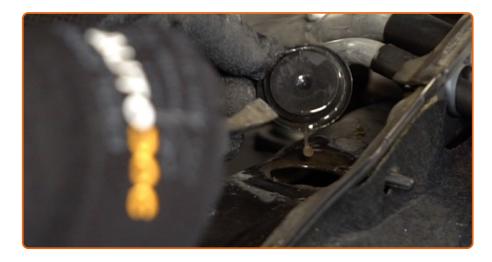
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Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

5



Remove the shock strut mount cap. Use a crowbar.

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Loosen the upper fastener of the shock strut mount. Use a drive socket #16. Use a ratchet wrench.

7



Secure the wheels with chocks.

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Loosen the wheel mounting bolts. Use wheel impact socket #17.

9



Raise the front of the car and secure on supports.

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Unscrew the wheel bolts.

AUTODOC recommends:

Important! Hold the wheel while unscrewing the fastening bolts.
Audi A4 B6 Avant

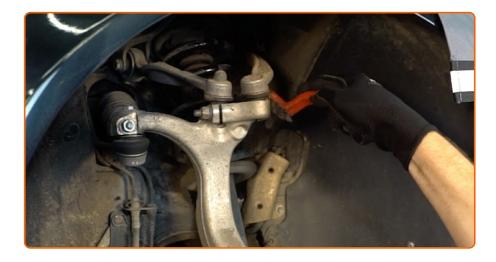
11



Remove the wheel.

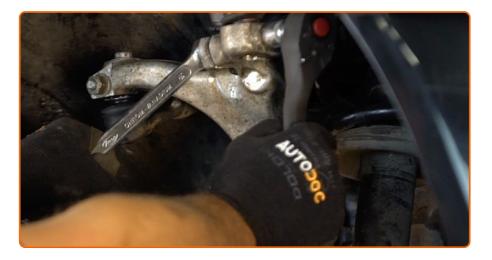
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Clean all joints of the arm. Use a wire brush. Use WD-40 spray.

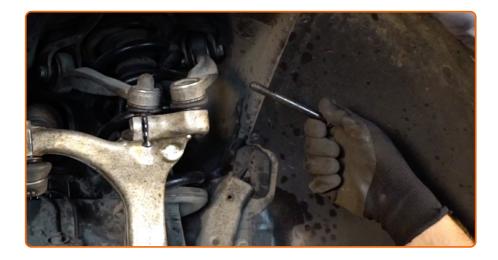
13



Unscrew the upper control arm fasteners (2 pieces). Use a combination spanner #18 (2 pieces). Use a drive socket #18. Use a ratchet wrench.

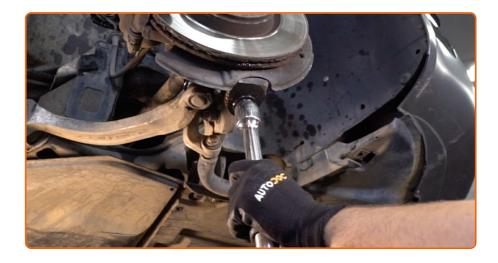
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Remove the fastening bolt.

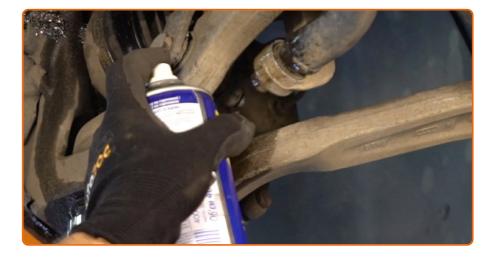
15



Support the arm. Use a hydraulic transmission jack.

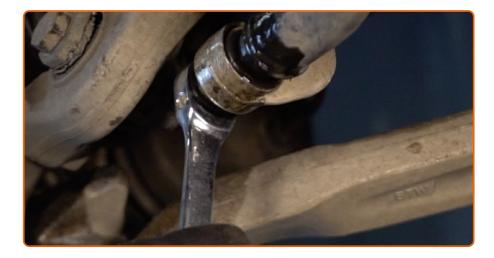
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Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.

17



Unscrew the fasteners connecting the stabiliser link to the stabiliser bar. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.

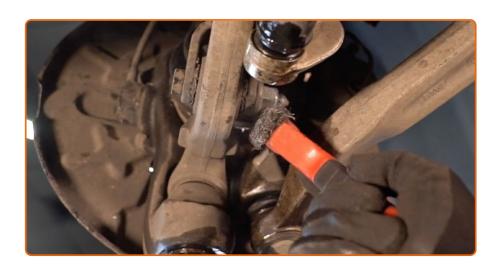
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Remove the stabilizer rod. Use a crowbar.

19



Clean the shock strut fasteners. Use a wire brush. Use WD-40 spray.

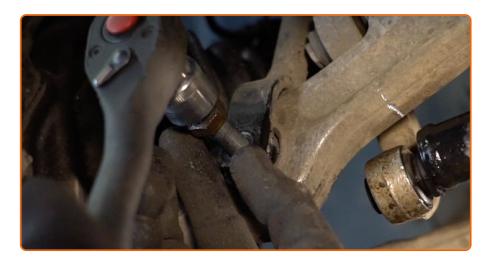
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Unscrew the lower fastener of the shock absorber strut. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.

21



Remove the fastening bolt.

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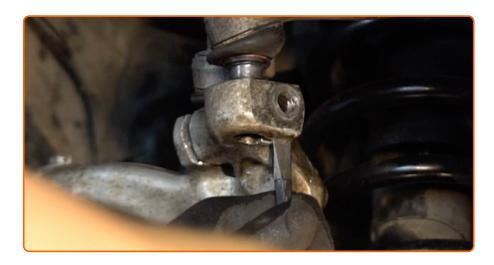


Remove the support from under the arm.

AUTODOC recommends:

 Replacement: coil springs – Audi A4 B6 Avant. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

23



Release the fastener that connects the control arm ball joint to the steering knuckle. Use a flat metal-working chisel. Use a hammer.

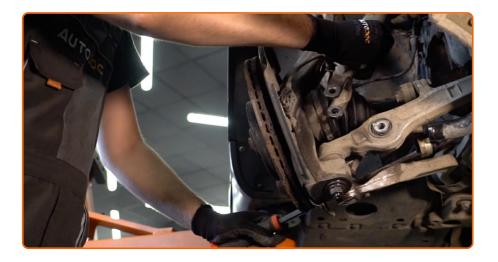
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Detach the upper control arm from the steering knuckle (2 pieces). Use a pin punch. Use a hammer.

25



Detach the bottom part of the shock strut. Use a crowbar.

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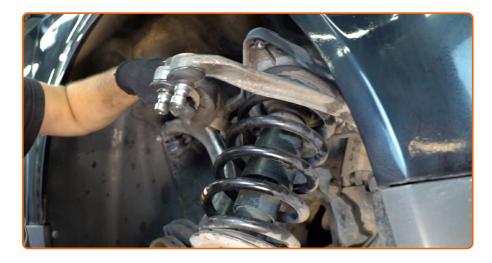


Unscrew the top fastening of the shock strut mount. Use a drive socket #16. Use a ratchet wrench.

AUTODOC recommends:

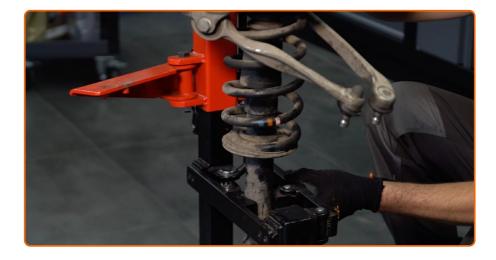
 Audi A4 B6 Avant – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

27



Remove the suspension strut.

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Set the shock absorber strut on the spring compressor tool.

Replacement: coil springs – Audi A4 B6 Avant. Professionals recommend:

- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

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Treat the shock strut rod. Use WD-40 spray.

30

Treat all joints of the arm. Use WD-40 spray.

31



Unscrew the fasteners connecting the control arms to the shock strut mount. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.

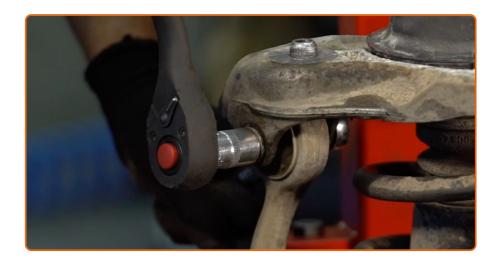
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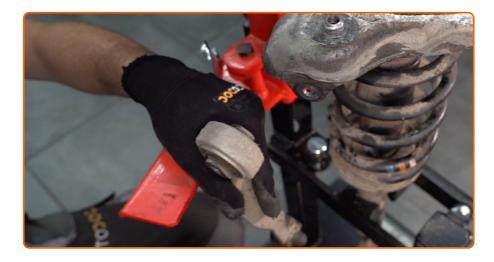
Remove the fastening bolt.

33



Remove the arm.

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Unscrew the fasteners connecting the control arms to the shock strut mount. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.

35



Remove the arm.

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Compress the spring.

37



Remove the strut piston rod nut. Use HEX No.H6. Use a drive socket #16. Use a ratchet wrench.

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Remove the top strut mount.

39



Remove the shock absorber mount, boot and bump stop.

AUTODOC recommends:

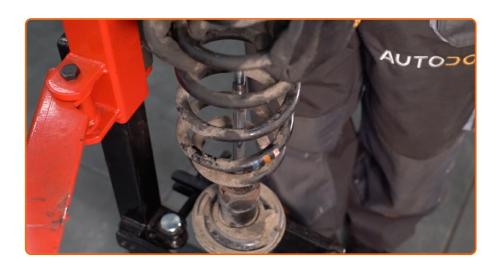
 Replacement: coil springs – Audi A4 B6 Avant. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

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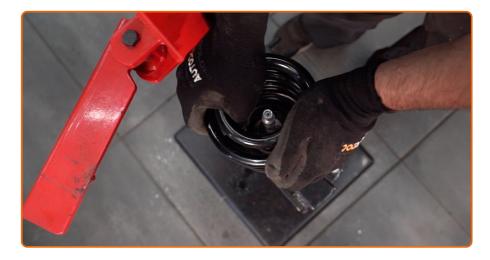
Release the coil spring.

41



Remove the spring.

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Install the spring on the shock absorber.

43



Compress the spring.

44

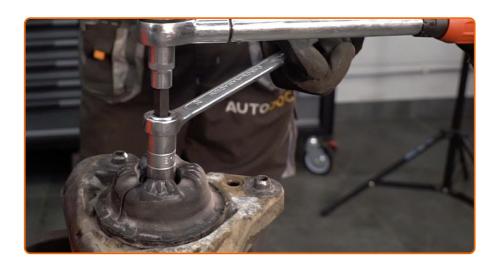
Install the mount, the boot and the bump stop on the shock absorber.

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Install the upper strut mount and the strut mount bearing.

46



Tighten the shock strut piston rod nut. Use HEX No.H6. Use a drive socket #16. Use a torque wrench. Tighten it to 60 nm torque.

Replacement: coil springs – Audi A4 B6 Avant. Tip from AUTODOC experts:

 Check to make sure the spring is positioned correctly. Avoid its misalignment.

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Decompress the spring.

48



Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.

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Install the control arms.

Replacement: coil springs – Audi A4 B6 Avant. Tip from AUTODOC:

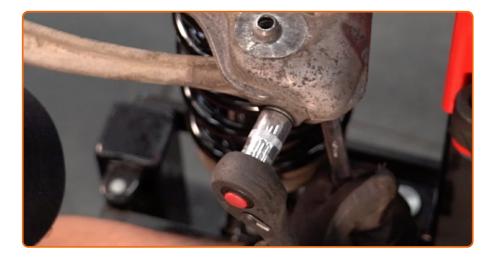
• Position the control arm according to its mounting holes.

50

Install the fastening bolt.

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Screw in the fasteners connecting the control arms to the shock strut mount. Use a combination spanner #16. Use a drive socket #16. Use a ratchet wrench.

52



Tighten the fastener connecting the control arms to the shock strut mount. Use a combination spanner #16. Use a drive socket #16. Use a torque wrench. Tighten it to 80 nm torque.

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Treat the shock strut rod. Use copper grease.

54



Remove the assembled shock strut.

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Install the shock strut into the wheel arch.

56



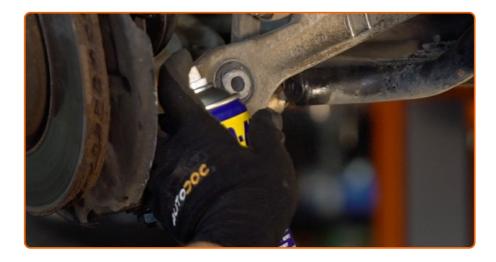
Screw the top fastening of the shock strut mount. Use a drive socket #16. Use a ratchet wrench. Do not tighten it.

AUTODOC recommends:

 Audi A4 B6 Avant – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

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Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.

58



Attach the bottom part of the shock strut.

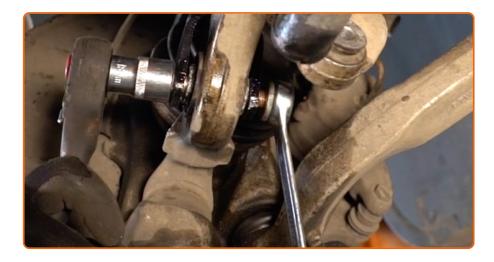
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Install the fastening bolt.

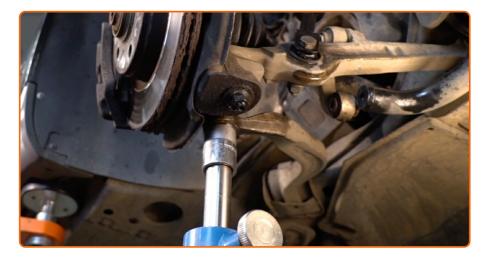
60



Screw in the lower fastener of the shock strut. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.

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Support the arm. Use a hydraulic transmission jack.

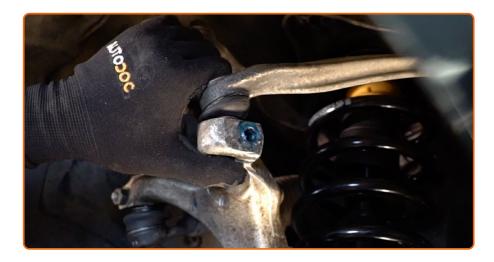
62



Treat all joints of the arm. Use a multipurpose grease. Use a flat screwdriver.

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Attach the upper control arm to the steering knuckle (2 pieces).

64



Install the fastening bolt. Use a crowbar.

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Screw in the fasteners (2 pieces) of the upper control arm. Use a combination spanner #18. Use a drive socket #18.

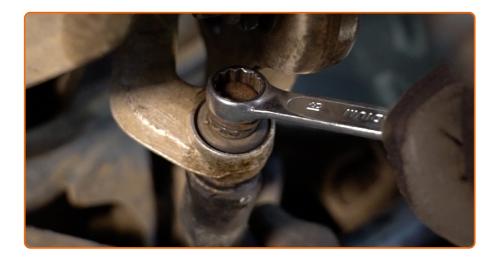
66



Install the transverse stabilizer link.

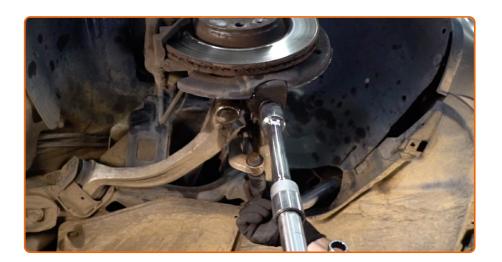
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Tighten the stabiliser link fastener.

68



Raise the hydraulic transmission jack by 10-15 cm.

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Tighten the upper control arm fasteners (2 pieces). Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 82 Nm torque.

70



Tighten the fastener connecting the stabilizer link to the stabilizer bar. Use a combination spanner #16. Use a drive socket #16. Use a torque wrench. Tighten it to 65 nm torque.

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Tighten the lower fastening of the shock absorber. Use a drive socket #18. Use a torque wrench. Tighten it to 90 nm torque.

72



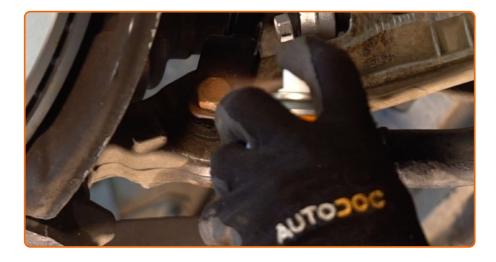
Remove the support from under the arm.

AUTODOC recommends:

 Replacement: coil springs – Audi A4 B6 Avant. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

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Treat all joints of the arm. Treat the shock strut fasteners. Use copper grease.

74



Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

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Clean the brake disk surface. Use a brake cleaner.

AUTODOC recommends:

 Replacement: coil springs – Audi A4 B6 Avant. After applying the spray, wait a few minutes.

76



Install the wheel.

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AUTODOC recommends:

 Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. Audi A4 B6 Avant

77



Screw in the wheel bolts. Use wheel impact socket #17.

78



Lower the car.

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Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #16. Use a torque wrench. Tighten it to 65 Nm torque.

80



Treat the fasteners of the shock strut mount. Use copper grease.

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Install the shock strut mount cap.

82



Install and secure the cowl grille.

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Install the cowl grille seal.

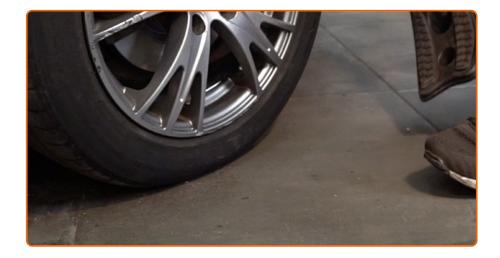
84



Tighten the wheel bolts using a criss-cross pattern. Use a torque wrench. Tighten it to 120 Nm torque.

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Remove the jacks and chocks.

86



Remove the fender protection cover.

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Close the hood.

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DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

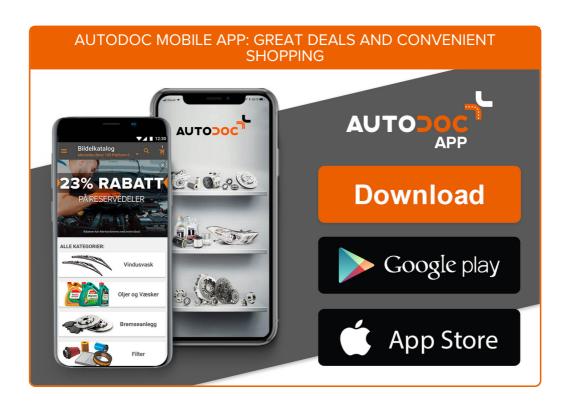


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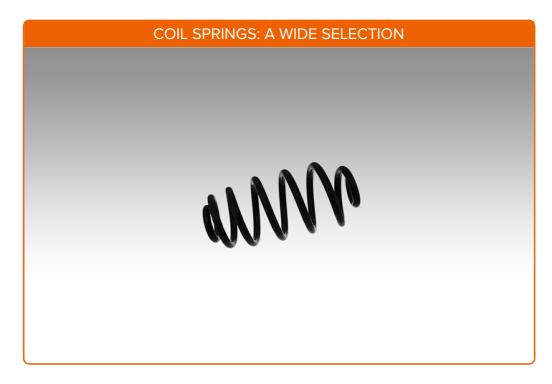




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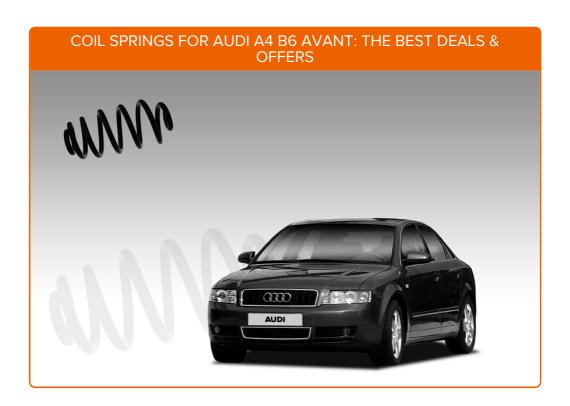






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